

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Claim 1 (Currently Amended): A process for producing a moulding from a plastic, comprising:

coating a moulding on one or more sides with a lacquer system,

wherein the lacquer system comprises:

- a) a binder or a binder mixture;
 - b) optionally, a solvent or solvent mixture;
 - c) optionally, a lacquer systems additive; and
 - d) a thickener selected from the group consisting of 0 to 20% by weight of polymeric thickeners ~~at from 0 to 20% content~~ and 0 to 40 % by weight of oligomeric thickeners ~~at from 0 to 40% content~~, based on dry film components a), c), d) and e);
 - e) from 5 to 500 parts by weight, based on component a), of an electrically conductive metal oxide in the form of a powder, a dispersion and/or a sol, having a median primary particle size of from 1 to 80 nm and a percentage degree of aggregation of from 0.01 to 99%, wherein said degree of aggregation is based on aggregates which comprise at least two primary particles;
 - f) from 5 to 500 parts by weight, based on component a), of coated inert nanoparticles having a median primary particle size of from 2 to 100 nm; and
- curing said lacquer system.

Claim 2 (Previously Presented): The process according to Claim 1, wherein

the lacquer components a) to c) have a viscosity of from 5 to 500 mPa.s measured in a Brookfield LVT viscometer.

Claim 3 (Previously Presented): The process according to Claim 1, wherein the lacquer system components a) to c) have a viscosity of from 150 to 5000 mPa.s.

Claim 4 (Previously Presented): The process according to Claim 1, wherein said inert nanoparticles are SiO₂ nanoparticles.

Claim 5 (Previously Presented): The process according to Claim 1, wherein the electrically conductive particles are selected from the group consisting of indium tin oxide, antimony tin oxide, doped indium tin oxide and mixtures thereof.

Claim 6 (Previously Presented): A plastics moulding obtained by the process of Claim 1, wherein the plastics moulding comprises PMMA, PC, PET, PET-G, PE, PVC, ABS or PP.

Claim 7 (Previously Presented): A glazing, encasing structure, clean room equipment, machine cover, an incubator, a display, a visual display screen, a visual-display-screen cover, a back-projection screen, a medical apparatus, or an electrical device, comprising:

the plastics moulding of Claim 6.

Claim 8 (Previously Presented): The process according to Claim 1, wherein component b) is present.

Claim 9 (Previously Presented): The process according to Claim 1, wherein component c) is present.

Claim 10 (Previously Presented): The process according to Claim 1, wherein component d) is present.

Claim 11 (Previously Presented): The process according to Claim 1, wherein component d) is present and comprises a copolymer of (meth)acrylates.

Claim 12 (Previously Presented): The process according to Claim 1, wherein component d) is present and comprises oligomeric epoxyacrylates, urethane acrylates, silicone acrylates, polyester acrylates, epoxy acrylates, polyethylene glycol diacrylates or mixtures thereof.

Claim 13 (Previously Presented): The process according to Claim 1, wherein component e) is in an undispersed condition.

Claim 14 (Previously Presented): The process according to Claim 1, wherein component e) comprises (i) an aggregate of primary particles, (ii) an agglomerate of primary particles and aggregates, or (iii) combinations of (i) and (ii).

Claim 15 (Previously Presented): The process according to Claim 1, wherein component e) comprises an aggregate of primary particles, wherein a particle size of the aggregate is up to 500 nm.

Claim 16 (Previously Presented): The process according to Claim 1, wherein component e) comprises an aggregate of primary particles, wherein a particle size of the aggregate is up to 200 nm.

Claim 17 (Previously Presented): The process according to Claim 1, wherein component e) comprises an agglomerate of primary particles and aggregates, wherein a particle size of the agglomerate is up to 2000 nm.

Claim 18 (Previously Presented): The process according to Claim 1, wherein component e) comprises an agglomerate of primary particles and aggregates, wherein a particle size of the agglomerate is up to 1000 nm.

Claim 19 (Previously Presented): The process according to Claim 1, wherein component e) comprises an aggregate which comprises secondary particles durably combined by way of sinter bridges, wherein said aggregate cannot be separated by a dispersion process.

Claim 20 (Previously Presented): The process according to Claim 1, wherein component e) comprises primary particles having a median primary particle size from 5 to 50 nm.

Claim 21 (Previously Presented): The process according to Claim 1, wherein component e) comprises an agglomerate which comprises secondary particles held together by Van der Waals forces and separable by dispersion processes.

Claim 22 (Previously Presented): The process according to Claim 1, wherein component e) comprises an indium tin oxide powder which has from 10 to 80% by volume content of aggregated particles whose particle size is from 50 to 200 nm.

Claim 23 (Previously Presented): The process according to Claim 1, wherein component e) comprises indium tin oxide powder obtained by converting an metal chloride compound into a metal oxide in a high-temperature flame.

Claim 24 (Previously Presented): The process according to Claim 1, wherein component e) comprises from 25 to 90% of particles agglomerated in a chain-like series.

Claim 25 (Previously Presented): The process according to Claim 24, wherein the chain-like aggregates have branching or take the form of three-dimensional structures of series of particles.

Claim 26 (Previously Presented): The process according to Claim 1, wherein component e) comprises indium tin oxide having a median primary particle size from 1 to 200 nm, a BET surface area according to DIN 66131 from 0.1 to 300 m²/g, a cubic structure of indium oxide, mesopores according to DIN 66134 from 0.03 ml to 0.30 ml/g, macropores according to DIN 66133 from 1.5 to 5.0 ml/g and a bulk density according to DIN ISO 787/11 from 50 to 2000 g/l.

Claim 27 (Currently Amended): The process according to Claim 1, wherein said lacquer composition comprises from 0.1 to 50% by weight of inert nanoparticles and from 20 to 80 ~~20 to 70~~% by weight of ITO, based in each case on a dry film.

Claim 28 (Canceled):

Claim 29 (Previously Presented): The process according to Claim 1, wherein said inert nanoparticles are organosols or silica sols.

Claim 30 (Previously Presented): The process according to Claim 1, wherein said inert nanoparticles are SiO₂, Al₂O₃ or combinations thereof.

Claim 31 (Previously Presented): The process according to Claim 1, wherein said inert nanoparticles are zirconium oxide, titanium dioxide, iron oxide or mixtures thereof.

Claim 32 (Previously Presented): The process according to Claim 1, wherein said inert nanoparticles are fine-particle destructured fumed silicas.

Claim 33 (Previously Presented): The process according to Claim 1, comprising functional nanoparticles.

Claim 34 (Previously Presented): The process according to Claim 1, wherein the plastic is transparent.

Claim 35 (Currently Amended): The process according to Claim 1, wherein a transparency of the moulding having a ~~laquer~~ lacquer coating without inert nanoparticles is substantially the same as the transparency of the moulding having a ~~laquer~~ lacquer coating with inert nanoparticles.

Claim 36 (Previously Presented): The process according to Claim 1, wherein a conductivity in said coating which is achieved when using said nanoparticles and not more than 33% by weight of ITO is identical to a conductivity achieved when using no nanoparticles and 50% by weight of ITO.

Claim 37 (Previously Presented): The process according to Claim 1, wherein component d) is present and comprises a copolymer of (meth)acrylates and a vinyl monomer in copolymerized form.

Claim 38 (Previously Presented): The process according to Claim 1, wherein component d) is present and comprises a copolymer comprising methyl methacrylate and butyl acrylate.

Claim 39 (Previously Presented): The process according to Claim 1, wherein component d) is present and comprises a polymer comprising about 75% by weight of methyl methacrylate and about 25% by weight of butyl acrylate.

Claim 40 (Previously Presented): The process according to Claim 1, wherein component e) comprises indium tin oxide obtained by

mixing a solution of an indium salt with a solution of a tin salt, optionally adding a solution of a salt of at least one doping component, to obtain a solution mixture,

atomizing said solution mixture, to obtain an atomized solution mixture,

pyrolyzing the atomized solution mixture, thereby obtaining exhaust gases and isolating said indium tin oxide from the exhaust gases,

wherein said indium salt is a chloride, nitrate, acetate, or alcoholate.

Claim 41 (New): A process for producing a moulding from a plastic, comprising: coating a moulding on one or more sides with a lacquer system,

wherein the lacquer system comprises:

- a) a binder or a binder mixture;
 - b) optionally, a solvent or solvent mixture;
 - c) optionally, a lacquer systems additive; and
 - d) a thickener selected from the group consisting of 0 to 20% by weight of polymeric thickeners, and 0 to 40 % by weight of oligomeric thickeners, based on dry film components a), c), d) and e);
- e) from 5 to 500 parts by weight, based on component a), of an electrically conductive metal oxide in the form of a powder, a dispersion and/or a sol, having a median primary particle size of from 1 to 80 nm and a percentage degree of aggregation of from 0.01 to 99%, wherein said degree of aggregation is based on aggregates which comprise at least two primary particles, wherein a content of aggregated particles whose particle size is from 50 to 200 nm is 5 to 80% by volume; and

f) from 5 to 500 parts by weight, based on component a), of coated inert nanoparticles having a median primary particle size of from 2 to 100 nm; and curing said lacquer system.

Claim 42 (New): The process according to Claim 41, wherein component e) comprises 25 to 90% of particles agglomerated in a chain-like series.